

UNITED STATES DISTRICT COURT
NORTHERN DISTRICT OF CALIFORNIA

TWILIO, INC.,
Plaintiff,

v.

TELESIGN CORPORATION,
Defendant.

Case No.16-cv-06925-LHK (SVK)

**ORDER DENYING TELESIGN'S
MOTION FOR LEAVE TO AMEND ITS
INVALIDITY CONTENTIONS**

Re: Dkt. No. 161

Twilio, Inc. (“Twilio”) filed this patent infringement action on December 1, 2016, alleging that TeleSign Corporation’s (“TeleSign”) products infringe its patents. ECF 1. Pending before the Court is TeleSign’s second motion for leave to amend its invalidity contentions. ECF 161. This time around, TeleSign seeks leave based on the Court’s October 13, 2017 claim construction order. ECF 137. Having carefully considered the parties’ submissions, and having had the benefit of oral argument on January 30, 2018, the Court denies TeleSign’s second motion for leave to amend its invalidity contentions for the reasons set forth below.

I. RELEVANT BACKGROUND

TeleSign seeks leave to amend in light of the Court’s construction of the term “REST API” in October 2017. ECF 161 at 6. The REST API term has been the subject of a great deal of discussion by both parties and their experts since at least June 2017. Those discussions in general provide important context for TeleSign’s second motion. There are two references in particular that have figured prominently in the REST API discussions: 1) The dissertation of Dr. Roy Fielding (the “Fielding dissertation”), published in 2000; and 2) The textbook RESTful Web Services by Richardson and Ruby (“the REST Textbook”), published in 2007, which TeleSign now seeks to add as prior art.

A summary of the parties’ attention to the REST API term is helpful.

On June 6, 2017, Twilio served proposed constructions of claim terms on TeleSign, including a proposed construction of REST API. Twilio’s June 6th proposed construction was: “An application programming interface that is operable with the Representation State Transfer (REST) conventions.” ECF 93-8 at 8. As extrinsic evidence in support of its June 6th proposed construction, Twilio listed “Newton’s Telecom Dictionary (22nd Ed. 2006).” *Id.* Newton’s Telecom Dictionary defines REST as “[a] term coined by Roy Fielding in his Ph. D. dissertation to describe an architecture style of networked systems . . .” ECF 105-14 at 5 (excerpt of Newton’s Telecom Dictionary submitted with Twilio’s Opening Claim Construction Brief).

On July 14, 2017, TeleSign filed its first motion to amend its invalidity contentions arguing, in part, that based on Twilio’s June 6, 2017 proposed construction of REST API, TeleSign would need to add its own products as predating technology. ECF 93 at 17-18. TeleSign also argued that “considering Twilio’s construction of ‘REST API’ and ‘URI’ as well as Twilio’s characterization of ‘REST’ in its response to TeleSign’s interrogatory and Twilio’s damages contentions, TeleSign has identified for the first time 35 U.S.C. § 103 arguments that it now includes in [its proposed amendments].” ECF 93 at 17.

On August 7, 2017, TeleSign deposed Twilio’s expert, Dr. Kevin Almeroth and used the REST Textbook that it now seeks to add as prior art as an exhibit to the deposition. *See* ECF 110-2 at 3 (Exhibit 5, the REST Textbook), 40 (questioning of Dr. Almeroth on Exhibit 5). During the deposition, TeleSign referenced a Dr. Almeroth declaration which identified the REST Textbook. ECF 110-3 at 40; ECF 105-8 (Dr. Almeroth’s reply declaration, signed July 27, 2017). The exhibit TeleSign used during the deposition contained the first 105 pages of the REST Textbook, and TeleSign questioned Dr. Almeroth about specific pages in the book. ECF 110-2 at 40. Further, Dr. Almeroth referenced Dr. Fielding’s definition of REST, including the four constraints ultimately adopted by the Court, no less than seven times. *See* ECF 110-2 at 9, 22-23, 27-28, 30, 46.

On August 18, 2017, the Court allowed TeleSign to amend its invalidity contentions. ECF 109 at 8. The Court found TeleSign had not been diligent in seeking leave to amend its contentions, but because of the early stage of the case and the absence of prejudice from

amendment at that time, the Court granted TeleSign leave to amend. ECF 109 at 4-8. In finding a lack of diligence, the Court stated:

The Court is not persuaded that Twilio’s preliminary (but not “new”) construction for “REST API” broadens the universe of prior art available to challenge the validity of the ‘376 patent. Rather, it appears that TeleSign had as much support for the challenge before Twilio’s proffered construction as after. At oral argument, TeleSign’s counsel acknowledged that REST is “not as well defined” as SOAP, and that when looking to how people in the art define RESTful and REST, there are competing definitions on whether SOAP can be operable with REST. ECF 106. This is as true today as it was when TeleSign served its contentions on May 1st. Therefore the Court finds that TeleSign has not demonstrated the requisite diligence in support of its amendment.

ECF 109 at 7-8.

The Court allowed TeleSign to amend its invalidity contentions to include the following contentions about REST and obviousness:

Depending on claim construction, and/or to the extent that TeleSign’s early use is found not to expressly disclose “wherein the call router API is substantially a Representational State Transfer (REST) API,” such functionality is inherent to the prior art in that it is necessarily present and would be so recognized by those of skill in the art. In addition, it is obvious that a call router API is substantially a Representational State Transfer (REST) API. Indeed, a skilled artisan would understand that there are a finite number of identified, predictable solutions, namely, embedding zero, some or all state into URIs of a call router to achieve a reasonable expectation of success in responding to an API request directed at such URIs. Further, one skilled in the art would be aware of various well-known, potential REST design principles, such as statelessness, thereby rendering this claim limitation obvious, in addition to other expert opinions relating to the obviousness of this claim.

ECF 119-3 at 83.

In claim construction briefing the parties submitted competing definitions for REST API:

<u>Twilio’s Proposed Construction</u>	<u>TeleSign’s Proposed Construction</u>
An application programming interface that is operable with the Representation State Transfer (REST) conventions. ECF 105 at 11.	Indefinite <i>Alternatively:</i> A programmatic communication interface using a varying level of statelessness. ECF 110 at 10.

In its opening claim construction brief filed on August 14, 2017, Twilio discussed the four constraints from the Fielding dissertation. ECF 105 at 12. On August 27, 2017, TeleSign filed its

responsive claim construction brief, arguing that the term REST was indefinite. ECF 110. In doing so, TeleSign cited extrinsic evidence including specific pages from the Fielding dissertation (*see* ECF 110 at 13; ECF 110-3 at ¶¶ 33, 37, citing pages 4 and 79 of the Fielding dissertation) and the REST Textbook (*see* ECF 110 at 13-14). TeleSign attached excerpts of the REST Textbook to its brief including pages 16-17 (Chapter 1), 29-31 (Chapter 2), and 79-81 (Chapter 4). ECF 110-5.

The Court held a Markman hearing on October 5, 2017, during which the Court indicated it would adopt Twilio’s definition, modified to include the four constraints set out by the Fielding dissertation. ECF 161-3 at 5:7-11. On October 13, 2017, the Court issued its claim construction order defining REST API as follows:

[A]n application programming interface that complies with Representational State Transfer (REST) interface constraints, which are: identification of resources; manipulation of resources through representations; self-descriptive messages; and, hypermedia as the engine of application state.

ECF 137 at 42. In its order, the Court rejected TeleSign’s indefiniteness argument, in part because of the extrinsic evidence cited by TeleSign and its expert in both this action and the *inter partes* review proceedings. ECF 137 at 19-20. In examining the materials submitted by TeleSign, the Court concluded that rather than proving that REST API is a subjective term that could be applied inconsistently by skilled artisans as TeleSign argued, the evidence and the experts demonstrated that there was a common understanding of REST at the time of invention. *Id.* Specifically, the Court relied on the Fielding dissertation and the REST Textbook. ECF 137 at 19-22. The Court acknowledged Fielding’s four constraints as well as other principles of REST that the parties appeared to agree upon including statelessness, the use of HTTP for transport and operation on resources, and that “REST-based architectures and API’s were well known in the art at the time of the filing of the filing of the ‘376 patent.” ECF 20-21 (citing and quoting Telesign’s expert, Dr. Neilson, in support of TeleSign’s *inter partes* review petition).

TeleSign filed its motion to amend its invalidity contentions on December 22, 2017, over two months after the Court’s claim construction order. ECF 161. Arguing that the Court adopted a new construction of REST API, TeleSign seeks leave to 1) Add an obviousness combination based on the REST Textbook; and 2) Submit new charts for a previously disclosed reference in

combination with the REST Textbook. ECF 161 at 4. Specifically, within its proposed charts, TeleSign references the REST Textbook pages 13, 14, 18-19 (Chapter 1), 54 (Chapter 3), 81, 83, 84, 86-87, 94-95, 97 (Chapter 4), 217-218 and 221 (Chapter 8).

II. LEGAL STANDARD

Pursuant to the Northern District of California’s Patent Local Rules, parties exchange infringement and invalidity contentions early in a case. *See* Patent Local R. 3. The contentions are not a mere formality but rather a requirement “to eliminate the gamesmanship of hints in favor of open disclosure.” *Largan Precision Co, Ltd. v. Genius Elec. Optical Co.*, No. 13-CV-02502-JD, 2014 WL 6882275, at *4 (N.D. Cal. Dec. 5, 2014). Amendment of infringement contentions or invalidity contentions may be made only by order of the Court upon a timely showing of good cause. “[A]s a general rule, mistakes or omissions are not by themselves good cause.” *Karl Storz Endoscopy-Am., Inc. v. Stryker Corp.*, No. 14-CV-00876-RS (JSC), 2016 WL 2855260, at *3 (N.D. Cal. May 13, 2016) (internal citation and quotation omitted). Non-exhaustive examples of circumstances that may, absent undue prejudice to the non-moving party, support a finding of good cause include:

- (a) A claim construction by the Court different from that proposed by the party seeking amendment;
- (b) Recent discovery of material, prior art despite earlier diligent search; and
- (c) Recent discovery of nonpublic information about the Accused Instrumentality which was not discovered, despite diligent efforts, before the service of the Infringement Contentions.

Patent Local R. 3–6.

Whether a party has been diligent requires a two-step inquiry: “(1) diligence in discovering the basis for amendment; and (2) diligence in seeking amendment once the basis for amendment has been discovered.” *Monolithic Power Sys., Inc. v. Silergy Corp.*, No. 14-1745-VC (KAW), 2015 WL 5440674, at *2 (N.D. Cal. Sept. 15, 2015). “In considering the party’s diligence, the critical question is whether the party could have discovered the new information earlier had it acted with the requisite diligence.” *Radware Ltd. v. F5 Networks, Inc.*, No. C-13-02021-RMW, 2014 WL 3728482, at *1 (N.D. Cal. 2014). If the court determines that the moving party was not diligent, the inquiry may end there. *See Acer, Inc. v. Tech. Properties Ltd.*, No.

5:08-CV-00877 JF/HRL, 2010 WL 3618687, at *5 (N.D. Cal. Sept. 10, 2010). However, the court retains discretion to grant leave to amend even in the absence of diligence so long as there is no prejudice to the opposing party. *See, e.g., Apple, Inc. v. Samsung Elecs. Co.*, No. CV 12–00630 LHK, 2012 WL 5632618, at *5–6 (N.D. Cal. Nov. 15, 2012); *U.S. Ethernet Innovations, LLC v. Acer, Inc.*, No. 10–cv–3724 CW, 2013 WL 5609325, at *3 (N.D. Cal. Oct. 11, 2013).

III. DISCUSSION

a. The Court’s modification of the proposed construction of REST API does not provide good cause under the facts of this case.

As a preliminary matter, the Court’s construction of REST API does not automatically provide the requisite good cause that TeleSign urges. While a new construction adopted by a court can provide good cause, here, the Court’s construction of REST API is not new. Rather the Court modified the construction proposed by Twilio by adding clarifying language from a reference well known to and oft-cited by both parties. ECF 137 at 22 (“Having determined that claim 1 is not indefinite, the Court finds that a *modified version* of Twilio’s proposed construction best reflects the proper construction of ‘REST API.’”) (emphasis added). A modified construction may still provide good cause where the Court inserts new language into a construction. *See Tech. Properties Ltd. LLC v. Canon Inc.*, No. 14-3643 CW (DMR), 2016 WL 1360756, at *4 (N.D. Cal. Apr. 6, 2016) (allowing amendment where the court introduced a new phrase into the construction that was never proposed by either party). However, the facts of this case mitigate against good cause to amend notwithstanding the Court’s modified construction.

The definition of REST API has long been at issue, and the very language adopted by the Court has been examined closely by the parties and their experts since early in this case. *See supra* Section I. In the face of this evidence, TeleSign argues that it could not have anticipated the Court’s construction and to hold otherwise would require a party to assemble massive variations of contentions, anticipating all conceivable constructions. ECF 166 at 6; ECF 167. TeleSign’s fears are overblown, particularly in light of the specific facts in this case, examined more closely below. Indeed, far from having to amass countless potential contentions, TeleSign merely had to look to its own briefs, evidence, and expert’s opinion to address the Fielding constraints in a

timely fashion.

i. The Fielding Dissertation

TeleSign argues that it should be permitted to amend its contentions in light of the four “new” constraints added by the Court’s construction of REST API. *See* ECF 161 at 9-10. These four constraints adopted by the Court come, verbatim, from the Fielding dissertation which states: “REST is defined by four interface constraints: identification of resources; manipulation of resources through representations; self-descriptive messages; and, hypermedia as the engine of application state.” ECF 137 at 19 (the Court’s claim construction order quoting from page 82 of the Fielding dissertation). In TeleSign’s first motion for leave to amend, TeleSign pointed to Twilio’s June 6th proposed construction of REST API. *See* ECF 93 at 10, 17. Twilio’s June 6th proposed construction referenced “Newton’s Telecom Dictionary (22nd ed. 2006),” which explicitly relies on the Fielding dissertation in defining REST. ECF 93-8 at 8; ECF 105-14 at 5. In its reply brief, TeleSign complains that a reference to the Fielding dissertation alone could not have been enough to put TeleSign on notice regarding the four constraints because the Fielding dissertation includes 150 pages on the topic of REST. ECF 166 at 9.

However, the Court’s construction is not the first time these particular constraints were brought to TeleSign’s attention. At the August 7, 2017 deposition of Dr. Almeroth, Twilio’s expert identified Dr. Fielding’s four constraints as the four “principles” that define REST and proceeded to mention those four principles in response to several questions on how to identify REST. ECF 110-2 at 9, 22-23, 27-28, 30, 46. The four constraints were again identified by Twilio in its opening claim construction brief (ECF 105 at 12), and then referenced by TeleSign in its response (ECF 110 at 15). TeleSign’s expert Dr. Nielson also closely examined the Fielding dissertation, including a citation to a page in the same chapter as the identification of the four constraints. *Compare* ECF 110-3 at ¶ 37 (citing Chapter 5, page 79 of the Fielding dissertation) *with* ECF 105 at 12 (citing Chapter 5, page 82 of the Fielding dissertation for the four constraints). The Fielding constraints inserted by the Court have been the focal point of REST API contentions and argument since Twilio first pointed to them in June 2017 and are not new to this case or to

TeleSign.¹

ii. The REST Textbook

Similarly, the “newly identified” prior art that TeleSign seeks to add to its invalidity contentions is not art that TeleSign identified as a result of the Court’s construction. Troublingly, TeleSign does not state when it first discovered the REST Textbook, published in 2007. TeleSign has been in possession of the REST Textbook, and closely examined it, at least as early as preparations for the deposition of Dr. Almeroth on August 7, 2017. *See* ECF 110-2 at 40 (TeleSign used the REST Textbook as an exhibit during Dr. Almeroth’s deposition). TeleSign relied on the REST Textbook in its claim construction briefing submitted on August 28, 2017. ECF 110 at 13. Significantly, in its claim construction brief, TeleSign included excerpts from the same chapters of the REST Textbook that it now seeks to add to its charts. *Compare* ECF 110-5 (TeleSign’s Exhibit D to its claim construction brief with pages from Chapters 1 and 4) *with* ECF 161-10 (TeleSign’s proposed amendment to invalidity chart citing pages from Chapters 1 and 4).

In light of the foregoing, this Court is not persuaded that the Court’s modified construction of REST API provided a new light in which to view the REST Textbook. Instead, it appears that TeleSign, by its motion to amend, is seeking to correct its failure to timely recognize the significance of the REST Textbook, which is insufficient to establish good cause for amendment. *See Icon-IP Pty Ltd. v. Specialized Bicycle Components, Inc.*, No. 12-CV-03844-JST, 2014 WL 5361643, at *3 (N.D. Cal. Oct. 20, 2014) (denying leave to amend where the party had possession of the documents it sought to add but did not recognize the significance of the documents until later).

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¹ It appears from the record in this case that TeleSign’s objective in focusing on the Fielding constraints was to argue that the term REST API is indefinite. But whatever TeleSign’s purpose, it was well aware of precisely the constraints adopted by the Court long before the Court issued its claim construction order.

iii. TeleSign could have raised the proposed amendments in its first motion to amend invalidity contentions.

Furthermore, it appears that TeleSign could have and should have identified the REST Textbook in its invalidity contentions when it first moved to amend in July 2017. When TeleSign amended its invalidity contentions in July, TeleSign added a 35 U.S.C. § 103 argument. *See* ECF 93 at 17. Specifically, TeleSign added the following key language, “one skilled in the art would be aware of various, well-known, potential REST design principles, such as statelessness, thereby rendering this claim limitation obvious. . .” ECF 119-3 at 83. Thus in July, TeleSign made arguments regarding the invalidity of Twilio’s patents based on the fact that REST principles, as understood in the art, rendered certain patent claims obvious. Indeed, in his declaration submitted in *inter partes* review proceedings, TeleSign’s own expert acknowledged that REST-based architectures were “well known in the art at the time of filing the ‘376 patent.” ECF 115-3 at ¶ 61. The amendments TeleSign now seeks are simply an expansion of its July 14, 2017 amendments. In particular, TeleSign seeks leave to apply its obviousness arguments to more claims using a textbook that was as available and as relevant in July as it was after the Court’s October claim construction order. Therefore, this Court finds that the Court’s claim construction order does not provide good cause to allow amendment where the prior art TeleSign seeks to add was relevant and available at the time of Telesign’s first motion to amend.

b. TeleSign was not diligent and therefore the Court does not reach prejudice.

Not only does the Court’s construction order not provide the requisite good cause TeleSign urges, but against this backdrop TeleSign has not been diligent in seeking amendment. Even assuming, for the sake of argument, that the claim construction order was a catalyst for a motion to amend, TeleSign waited over two months to file its motion. In some cases, this length of time may demonstrate diligence, but here, where, as discussed at length above, the term is not new and the art is not newly discovered, TeleSign was not diligent in seeking amendment. *See Apple, Inc. v. Samsung Elecs. Co.*, No. 11-CV-01846-LHK, 2012 WL 1067548, at *5 (N.D. Cal. Mar. 27, 2012) (Court denied leave to amend where party waited nearly two months but had identified the prior art before the Court issued its claim construction order). Further, although the Court previously allowed amendment where more than nine months remained in discovery (ECF 109 at

1 8), here, discovery closes in three months. Because TeleSign has not been diligent in seeking
2 amendment, the Court does not reach the question of prejudice but acknowledges that it is late in
3 the case to be seeking amendment of invalidity contentions. Therefore, the Court denies
4 TeleSign's second motion to amend its invalidity contentions.

5 **IV. CONCLUSION**

6 Given this history of the term REST API in this case, TeleSign has not established good
7 cause for leave to amend its invalidity contentions. Furthermore, TeleSign has not been diligent in
8 seeking its amendment or discovering the basis for the amendment. As such, the Court denies
9 TeleSign's request for leave to amend its invalidity contentions.

10 **SO ORDERED.**

11 Dated: February 6, 2018

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14 SUSAN VAN KEULEN
15 United States Magistrate Judge
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